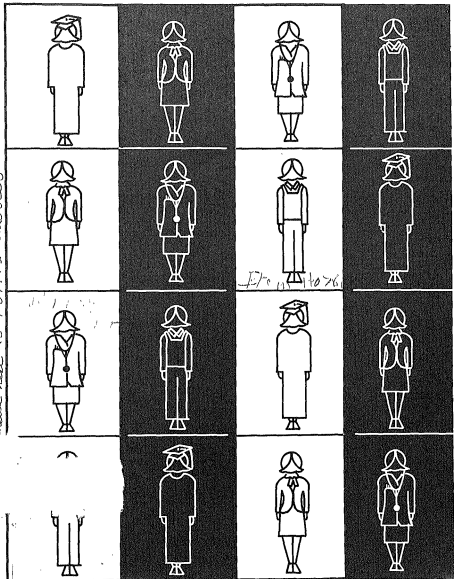


# Jobs for the Future



U.S. Department of Labor  
Office of the Secretary  
Women's Bureau  
Reprinted 1988



This publication is a cooperative effort of the Business and Professional Women's Foundation and the Women's Bureau. The research and writing were contributed by the Foundation, the editing and printing, by the Bureau.

**Business and Professional Women's Foundation** - Since its founding in 1956 by the National Federation of Business and Professional Women's Clubs, Inc. (BPW/USA), BPW Foundation has promoted full participation, equity, and economic self-sufficiency for working women through its programs of financial aid, research, and information. The BPW Foundation is a national public operating and grantmaking foundation supported by tax-deductible contributions from BPW members, corporate and independent foundations, and other donors.

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**Women's Bureau** - The Bureau was established by the U.S. Congress in 1920 to improve women's opportunities for profitable employment. As a part of the Office of the Secretary of Labor, the Bureau participates in departmental policymaking and program planning. It provides information on women's economic status and on legal developments affecting working women. Through its national headquarters and 10 regional offices, the Bureau implements programs that address national as well as local needs, and works cooperatively with women's organizations, commissions for women, educational and social service agencies, unions, the private sector, and government at all levels.

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# Jobs for the Future



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U.S. Department of Labor  
Ann McLaughlin, Secretary

Women's Bureau  
Shirley M. Dennis, Director

Reprinted 1988



## MESSAGE FROM THE WOMEN'S BUREAU

Today's jobs, using today's skills, will earn today's pay. But what about tomorrow? Will your job still exist in the same form? Will your skills be adequate to keep the job, and will it pay enough to cover tomorrow's needs?

Every worker and would-be worker should take time out to ask and answer questions such as these. For the fact is, jobs of the future may be very different from those around us today. The signs of change are already there, and today's workers who heed the signs will have the opportunity to chart their own future.

For example, by the Year 2000 approximately 47 percent of the work force of this country will be women; 6 out of 7 working age women will be at work. Women, minorities and immigrants are expected to account for over 80 percent of the net additions to the labor force between now and the turn of the century.

What's more, jobs will continue to shift away from goods-producing industries to the service sector. There will be more jobs open for professionals and managers, fewer jobs for operators and laborers. There will likely be major demographic shifts; labor supply and demand may not be in balance in certain localities. And many jobs will require a higher level of skills than ever before.

These are just some of the signs. Read them correctly; women who want and expect to do well in tomorrow's job market have important decisions to make today to prepare for the jobs of the future.

We hope this publication provides practical and helpful information for tomorrow's working women.

Shirley M. Dennis  
Director



## MESSAGE FROM THE BUSINESS AND PROFESSIONAL WOMEN'S FOUNDATION

Today's world is a world of change, and working women are at the center of that change. Women are moving into the work force in record numbers, taking on new jobs and responsibilities. They are doing so because they must--because they are often the breadwinners, sharing or bearing alone the responsibility for their families' economic well-being.

In the changing world of working women, career choice is more important than ever. This choice can determine one's future in a world where the typical woman born today can expect to work over 30 years of her adult life . . . where technology is transforming the workplace . . . where women still make less than two-thirds of what men make.

To make good choices, women must be aware of the opportunities open to them. They need to know which jobs offer the best pay and upward mobility, what training and education are good investments, and which jobs best match their skills and interests.

The Business and Professional Women's Foundation reaches out to give women the information they need to make informed decisions. We are proud to work with the Women's Bureau on this publication that can help women make choices for today and tomorrow.

Mary Ray Oaken  
National President





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## Introduction

Today the jobs of most working women are essential to the support of themselves and their families. Many of these women, however, have entered the labor force with little knowledge of the wide range of career options and without knowing what skills are needed most in the job market. In the absence of this very basic information, far too many women engage in work that is neither personally satisfying nor economically rewarding.

To guide you and other women and girls toward rewarding occupations and information about them, this publication suggests factors to consider when exploring and researching those job areas that interest you. This "how-to" booklet is designed to help you help yourself in making decisions about the kind of job or career to pursue, and the kind of education and experience you are likely to need to get the job you want. You may find this publication especially helpful if you are . . .

- . . . in school and planning your career
- . . . a recent high school graduate about to enter the job market for the first time
- . . . a mature woman seeking to enter or reenter the labor force
- . . . already working but want to make a career or job change.

There are three parts to this booklet. Part 1 is a guide to evaluating an occupation, and suggests questions you should ask yourself as you begin your career planning or job search: How much schooling do I need? What kinds of skills do I need? Have I already developed those skills? What are the training costs and how do they compare with the salary and advancement opportunities? How available are jobs--in which industries and where?

Part 2 provides information on 30 selected occupations and utilizes most of the evaluation factors discussed in Part 1. These occupations are grouped by the minimum level of schooling generally required to enter the various fields. They are merely samples selected from the more than 500 occupations in the 1980 Census list of occupations. Some of the selected occupations, such as secretary, dental hygienist, and registered nurse, have been chosen by many women for many years. Women are overrepresented in these jobs in comparison with their proportion in the labor force; therefore, such occupations are termed "traditional" for women. Finding employment in some of these areas is fairly easy because of their continued rapid growth in employment. These and other traditional jobs, however, may offer relatively low pay and few opportunities for advancement. Also included in Part 2 are "pathbreaking," or "nontraditional," occupations. In some of these fields, like law and medicine, women are making big percentage gains in well paying careers. In others, like firefighting, there are still

very few women. Among the 30 occupations listed are a few that are fairly new, such as physician assistant and computer service technician.

A majority of the occupations listed in Part 2 are in service-producing industries, which include occupations in health care, transportation, banking, insurance, education, repair and maintenance, among others. Industries in the service-producing sector are projected to generate 9 out of 10 new jobs between 1984 and 1995, according to the Bureau of Labor Statistics.

Part 2 also serves as a pattern for recording your own evaluation of occupations following your research of the jobs that interest you.

Part 3 of this booklet identifies resources to guide you in researching occupations. It lists organizations as well as publications that can help you answer specific questions about occupations you may be considering. It leads you to resources on employment issues that affect women particularly, and suggests where you can turn for assistance in maximizing your opportunities for better pay, promotions, and improved working conditions once you are on the job. This section also lists guides to your legal rights and to effective informal negotiations.

The Appendix lists a number of references that were used as background for the content of Part 1. You should consult these sources also for more details and recent data on the various aspects of your occupational evaluations.

Although your personal needs and interests will play a large part in your decisionmaking about the occupations you want to pursue, realistic career planning must also consider future demand for employment. The future of jobs cannot be projected with certainty, however, due to fluctuations in the economy, policy changes, and demographic trends. It is important, therefore, to be aware of the tools that can help you assess the changing job market and its demands for your skills. This booklet identifies some of those major tools in an effort to help you choose the right job for your future.

Part 1

HOW TO EVALUATE AN OCCUPATION



## HOW TO EVALUATE AN OCCUPATION

The information needed to evaluate an occupation is categorized into three segments:

- o Costs and benefits. Among your primary considerations for choosing an occupation are the costs of training and skill development, as well as the benefits in terms of salary and advancement.
- o Job availability. How likely you are to find a position if you are trained in a particular field is very important.
- o Working conditions. It is up to you to decide which of the many kinds of on-the-job working conditions and environments are important to you.

### Costs and Benefits

The first thing you will have to consider is the cost of preparation --in time and money--for an occupation. Many skills are acquired through some type of schooling. Some skills are valuable for a wide variety of occupations, while others are quite specialized. Some women also gain valuable work force skills in the course of raising a family or by participating in volunteer or after-school activities. You will want to think carefully and creatively about the skills you have developed and about how to learn--and get credit for--the skills and training you need.

Once you know how much time, effort, and money are needed to qualify for a particular career, you can then look realistically at what that career is likely to offer you in terms of starting salary and opportunities for advancement to better paying or more enjoyable work. Is your choice worth the investment to you? The salary, however, may not be the only important consideration about your job. You may need a convenient work schedule or job location, for example, if you have to make child care arrangements.

### Skills Needed

Some skills you bring to the job; others you develop while you are working. Some are stated requirements for the job. For example, secretaries are usually told that they need to type accurately and at least at a certain speed; computer programmers are expected to know a variety of computer languages.

Other skills may not be stated formally by the employer, but they may be just as essential for doing the job. Secretaries, for instance, are key people in coordinating work and communicating information in an office. Still, the skills for such tasks often do not appear in secretarial job descriptions. Likewise, women who sew in garment factories have to be highly skilled to run an industrial sewing machine and to sew as fast and as accurately as the job demands. However, these jobs are usually advertised as unskilled labor. All too often women are not paid for such "invisible

skills," so you may want to keep this issue in mind when you do your own inventory of compensated and uncompensated skills required for an occupation.

To help you in making an inventory, a listing of 16 basic skills and personality traits that you are likely to need for different jobs, particularly at the entry level, is provided below. Although some of these items may not be defined precisely as skills, they are characteristics that employers may use to rate you when they evaluate your job performance. In some occupations that are traditional for women, employers may require employees to be friendly, helpful, and pleasant, and to maintain certain standards of dress and style. These may be legitimate job qualifications in many occupations involving extensive public contact. However, female employees in some occupations are expected to be more friendly or more stylish than their male coworkers. Such expectations in manner or dress have more to do with stereotypes than with what the job really requires, and represent examples of sexually discriminatory expectations.

The basic skills as well as the desirable job-related personality traits which are suggested for evaluating occupations are:

-  Written and oral communication
-  Mathematical aptitude
-  Mechanical aptitude
-  Research skills
-  Good judgment, independent decisionmaking
-  Physical strength
-  Patience
-  Neat appearance
-  Manual dexterity
-  Outgoing personality
-  Logic and reasoning
-  Diplomacy
-  Eye/hand coordination
-  Organizational skills, systematic procedures
-  Concentration, attention to detail
-  Supervisory skills



### Training Requirements

Formal training requirements usually refer to schooling and on-the-job training programs. These sources are not the only means of acquiring the skills needed for a job, but employers usually require some formal training or a minimum level of schooling for entry-level work. Remember that sometimes, especially in a tight job market, you may need more than the minimum education to land a job. For example, a bachelor's degree is the minimum educational level required for most teaching positions below the college level and for jobs in social work. But since there are so many new applicants with these qualifications for relatively few openings, employers may be more likely to hire someone with a master's degree.

You should consider the sub-areas or special skills within large occupations that may be in greater-than-average demand. More and more employers are seeking experience or skills in the use of computerized equipment relevant to the particular job. Previous work experience may also be important. For example, systems analysts generally need experience as programmers. Work in wholesale selling usually requires previous work experience with that particular type of company or with a similar product. Also, you may need to obtain a license or pass an examination in order to work in a particular field.

Besides the basic training requirements for entry-level jobs, additional training is a continuing consideration. Sometimes, in order to get a promotion, stay on top of current trends in your field, or maintain your formal qualifications, additional training will be needed. Also, some occupations are good steppingstones during your training for a long-range career goal. For example, if you are completing a degree in accounting, you might want to work as a bookkeeper while in school.

Other occupations may demand advanced training to gain access to a wider range of career possibilities. To move from schoolteacher to principal, for instance, requires a certain number of graduate courses or an advanced degree as well as experience. Additional courses are also required for certification to teach particular subjects, like mathematics, or particular groups of students. Nursing specialties, such as midwifery or anesthesiology, have additional training requirements as well.

Some occupations also require continuing education to maintain or renew certification. For example, teachers often need ongoing in-service courses; doctors need to maintain continuing medical education credits for their licenses. Increasingly, employers are requiring formal schooling for occupations that people used to learn through on-the-job training. Those workers who gained their skills at the workplace may find themselves pressured to take classes simply to keep the jobs they have as well as to be eligible for advancement. This pattern is becoming increasingly common in the health occupations.

Much can be learned through coursework, and you should be aware that formal education is required for an increasing range of jobs. More and

more, people's employment and career opportunities are determined by the education and training they get before they enter the labor market.

Think seriously about what you can expect to gain from a particular educational program: Is it for a specific promotion? Will it teach a skill that cannot be learned any other way? Will an employer recognize that skill? While a certain level of schooling is essential for virtually all well paying jobs, education for specialized fields or at the higher level is increasingly expensive and no longer brings the guaranteed occupational payoff it once did. Think carefully about your goals when planning your education and training.

#### Availability of Training

Explore where to get the training you will need for a particular occupation. For specific programs and how to locate them in your area, see Part 3 on "How To Research an Occupation."

Four types of educational institutions which provide training are:

- o Public high schools and public vocational education programs. These provide training at little or no cost.
- o Private vocational education programs and schools. Many of these charge high fees. Before you invest in these programs, it is a good idea to check their success and placement rates and see if there is an equally reputable public program.
- o Junior and community colleges. These offer 1- and 2-year programs in a wide variety of occupations, usually at reasonable rates.
- o Four-year colleges and universities. These vary widely in cost, reputation, and types of programs offered.

Despite the growing emphasis on formal training, some of the most useful training takes place on the job. No matter what degree you earn, you will still need to learn many fundamental skills outside of the classroom and at the worksite. Some occupations emphasize on-the-job training and have well-defined training periods.

#### Costs of Training

Two evaluation factors which should be considered together are training costs and salary ranges. You should compare the cost of initial training for an occupation with how much you can expect to earn once you get the job. As stated previously, training costs can vary greatly depending on where you go to school. Private schools tend to charge higher fees or tuition for instruction that is free or inexpensive through a community college, high school, or adult education program. Check the costs of several programs before you make an investment.

For some occupations it may be best to go cheaply. For example, private schools that teach computer skills may be very expensive, and their graduates may have no better job access than those who take the same training at a community college. On the other hand, a more expensive (and prestigious) law school could make a substantial difference in making connections that help you get a job with a high salary.

### Salary Ranges

Salaries in any given occupation vary by size of firm and by geographical region, as well as by skills and experience of the worker. It is a good idea to contact the regional office of the Bureau of Labor Statistics or the regional office of the Women's Bureau for local salaries and comparisons with other areas. (See Part 3 for lists of addresses for both agencies.) You may also want to contact the information officer of a membership organization, such as a professional association or labor union, that represents people in the particular occupation.

Fringe benefits, such as pensions, health insurance, and child care, are an important part of your total compensation. Benefits vary greatly by workplace and industry. Good benefits may tip the balance when comparing salary ranges. In general, better benefits go with higher salaries. Ask all prospective employers about the benefits they offer.

When asking about benefits, consider things like paid vacation and sick leave, pension plans, parking, recreation and tuition benefits (for you and other family members), as well as medical and dental coverage. In looking at pension plans, ask about vesting. After you are "vested" in a pension plan, you will be entitled to receive at retirement the amount you and your employer have contributed, even if you have left that place of work long before you retire. The fewer years until vesting, the better for you. Check out the health plans to be sure you know what is covered. Find out about your service options: Will you have access to a health maintenance organization's services? Is the company plan a fee for service through a private insurance company? Does it include outpatient and preventive care or just hospitalization? Are optical and dental services included--at what additional cost? Can other members of your household be included in the coverage?

Find out what share of the costs for health coverage is paid by the employer and what share you must pay.

### Career Mobility

Be aware of which jobs offer "ladders," or opportunities for advancement, and which have "traps," or few opportunities for advancement out of dead-end jobs. Traps are also warnings about occupations that offer promotions which are promotions in name only. That is, they do not offer much in the way of salary increases, nor do they let you exercise a greater range of skills as your experience increases.

### Job Availability

Job availability factors help you judge the likelihood of landing a job once you complete training. They tell you how many people are currently employed in the field and where they tend to work. They also indicate how fast jobs are opening up--or shrinking--and whether projections for growth are based on particular patterns of economic growth; technological change, or regional movement of jobs. Another important factor--or support system--to explore is the identification and location of occupational interest organizations; they may be contacted for a range of information and services.

### Number of Persons Employed and Projected Job Growth

To gain an overall picture of an occupation's availability, check out the number of people employed as well as how fast that number is expected to grow. Sometimes jobs are expected to expand rapidly in a field that does not employ many people, so that the actual number of jobs may be small.

Think of it this way: If a field with 20,000 jobs increases by 10 percent, there will be 2,000 new jobs. If a field with 40 jobs increases by 50 percent, there will be only 20 new jobs. In a real example, the number of openings for physician assistant is expected to grow by 40 percent between 1984 and 1995. Another health service field, dental hygienist, is projected to expand only 29 percent. What difference will there be in the number of openings if there were 76,000 dental hygienists and 25,000 physician assistants in 1984? The answer is that the slower growing occupation--dental hygienist--will add twice as many jobs by 1995 as the faster growing occupation: 22,000 new jobs compared with 10,000.

This consideration is important when you examine new "high-tech" fields praised for their growth opportunities. They may be growing by large percentages, but that may not mean many new jobs.

Projecting how many new jobs will be created in a particular field is difficult. The Bureau of Labor Statistics (BLS) takes on this task for the Nation by providing forecasts. BLS, in the Occupational Outlook Handbook, rates occupations it lists against the average increase anticipated for all occupations. These ratings give you a consistent standard for comparison.

Keep in mind, though, that jobs also open up when people leave them. This is called turnover, and it varies with each occupation. You need to be concerned with turnover for another reason: If a job has a high turnover rate, it may suggest that either something is seriously wrong with it--the pace is too fast, stress too great, the work too routine and boring--or it may be a good job because it is a "way-station" or apprenticeship route to better jobs.

The following Bureau of Labor Statistics ratings show the percentage increase or decrease in job openings expected between 1984 and 1995, and job growth or decline compared with all occupations.

<u>Rating</u>	<u>Projected Change in Employment</u>
much faster than the average	31% or more
faster than the average	20-30%
about as fast as the average	11-19%
slower than the average	4-10%
little change expected	3% increase to 3% decrease
expected to decline	4% or greater decline

Be alert to limitations on the accuracy of any projections. Economic prediction is not always scientifically precise, and is subject to individual interpretations. Furthermore, estimates of how technological changes are likely to affect employment vary greatly. There are a number of errors and assumptions that could significantly alter an occupation's growth rate. Occupational groups are further sources of information, as are industry trade associations.

### Geographic Concentration

Although many occupations can be practiced in any geographical location of the country, certain jobs may be concentrated in urban or rural areas, or in particular regions of the country. For example, opportunities to work as an insurance underwriter are quite limited outside the major metropolitan areas where insurance companies are located. Yet teachers are still in demand in rural areas, and the need for certain health workers, especially registered nurses and physicians, is increasing in rural America. Engineers are in demand virtually everywhere, but this demand varies by specialization, such as chemical or electrical. Employment of computer systems analysts is more intensive in the West and Northeast, due to the recent concentration of computer firms and services in those regions.

Where you want to live and how mobile you are may affect your opportunities for getting the kind of job for which you train. It may be worthwhile--or even necessary--to look beyond those geographical locations where workers in particular occupations are concentrated, including the most heavily populated urban and suburban areas which require many kinds of goods and services. Opportunities may be more limited in the less concentrated locations but competition for the jobs may also be less intense.

For details on how to explore opportunities in the geographical area of your choice, consult Part 3, "How To Research an Occupation."

### Industries

Major sectors of the economy or major industries that hire people trained in specific fields are categorized broadly as:

o Service producing

- Services
- Finance, insurance, and real estate
- Public administration (Federal, State, and local governments)
- Wholesale and retail trade
- Transportation, communications, and other public utilities

o Goods producing

- Manufacturing
- Construction
- Mining
- Agriculture

During the last 10 to 15 years there has been a decline in the availability of jobs in manufacturing, especially in heavy industry like automobiles or metals, and an increase in jobs in the services sector (health care, food, cleaning, and information processing, among others). This decline has been called "deindustrialization," as U.S. business moves increasing amounts of its manufacturing to low-waged areas of the world, and as it replaces workers with computerized machinery.

Many of the disappearing jobs were held by white men, while many of the growing occupations are employing women and minorities. Some new services sector jobs--in allied health, specialized secretarial areas, or information science, for example--offer well paying career opportunities. But the majority of new jobs, such as those in the fast food industry, are low paying and do not offer much in the way of career advancement.

Occupational Interest Groups

Organizations which focus on specific occupations or trades include professional associations like the American Medical Association or Professional Secretaries International; associations of employees at a particular firm; and labor unions like the American Federation of Teachers, National Education Association, American Federation of State, County, and Municipal Employees, or the Service Employees International Union.

These organizations perform a wide variety of services for their members, including but not limited to the following: listing job openings and educational opportunities, providing low cost insurance and loans, engaging in public education and lobbying on behalf of members of the occupation, negotiating and bargaining collectively with employers on wages and working conditions, and assisting in pursuing complaints of discrimination or unfair treatment. Membership in any of these organizations requires paying dues, usually monthly or annually.

When choosing an occupation or a particular job, you will want to consider opportunities or requirements for joining one or several

occupational interest groups and to examine both the costs and the benefits each offers.

#### Working Conditions

It is practically impossible to learn about the full range of working conditions prior to employment. There are, however, a variety of characteristics to consider in any occupation. These include things that can make a job enjoyable for some people and less enjoyable for others--such as a great deal of contact with people. Other factors to consider are the degree of supervision received, work schedules, whether the occupation employs few women or whether the majority of workers are women, and matters of health and safety on the job.

All jobs and occupational fields will probably have some disadvantages. Today women in the labor force are working in many ways to improve their jobs and their job opportunities. When you find a job that looks rewarding, financially or otherwise, even if it has some negative aspects, it may be worth getting your foot in the door, gaining some experience in the field, and then trying to improve conditions.

#### Traditional or Pathbreaking Jobs

Occupational segregation by race and by sex is still a reality in the work force. In clerical fields like secretarial work, and in most health care occupations, 75 to 98 percent of the workers are women. Yet women make up only 44 percent of the total civilian work force. In the occupation of typist, for example, almost 13 percent of the workers are black women. Since black women make up only 5 percent of the overall labor force, they represent a higher proportion of the typists than would be expected if occupational distribution were more even. Occupations with such overrepresentations are termed "traditional." (Information on the employment of women by race and by detailed occupations is available for white, black, and Hispanic women but not for Asian, Pacific Islander, or Native American women.)

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Note: The terms "traditional" and "pathbreaking," as discussed in this publication, are based on comparisons of women's percentages in the overall labor force with their percentages in an occupation. They do not examine the proportions of women in an occupation compared with those of men; pathbreaking, or nontraditional, jobs are not identified as those in which fewer than 25 percent of the workers are women--a frequently used definition.

In contrast to traditional jobs, "pathbreaking" occupations are fields in which the large majority of workers are white and/or men. Women as a group or minority women are represented in proportions that are lower than their proportions in the labor force; therefore, you may be among the few women or the few women of color in an occupation. Data on traditional and pathbreaking jobs will help you evaluate new opportunities, and will also alert you to the possibility of encountering sex or race discrimination associated with being a "pioneer" in a field.

In some occupations, women are represented proportionally to their representation in the labor force. Some of these areas are the newly emerging fields which have not been sex-stereotyped, or the once nontraditional jobs in which women have increased their participation quite rapidly in recent years.

Occupational segregation by race and gender has been costly to women and minorities. Male-dominated occupations are higher paying, on average, than those dominated by females, and occupations held largely by white workers are generally higher paying than those held largely by minorities. Overall, women in full-time, year-round jobs earned about 68 percent of what similarly employed men earned in 1985. However, black women earned only 58 percent and Hispanic women only 55 percent of what white men earned.

Some groups advocate upgrading pay in traditional women's occupations to close the earnings gap. Another approach has been to encourage women to enter traditionally male occupations--those called pathbreaking for women. Encouragement and support for you to enter these occupations may come from the cooperative efforts of other women in the occupation and from working women's organizations. Nevertheless, you will need to consider a number of factors about pathbreaking jobs in making your job or career decision.

### Work Schedules

The kinds of schedules that employers offer vary greatly:

- o Regular schedule of 35- to 40-hour week, Monday through Friday.
- o Shift work, where the schedule may include evenings, late nights, or weekends on a regular basis.
- o Part-time work, which is prevalent in certain occupations. However, part-time work may be the alternative if full-time work is not available, or such work may be preferred by employees or by employers. Be aware that part-time workers generally earn less than full timers and receive few or no benefits.
- o Overtime may be involved in the job. It is important to ask whether this is likely, whether it is paid overtime, and whether the rate of pay is straight-time or time-and-a-half. The Federal wage and hour law requires overtime pay for "non-exempt" work beyond a specified number of hours, generally 40 a week. To find



out whether your occupation or workplace is exempt or covered by law, contact the local Wage and Hour Division of the U.S. Department of Labor.

#### Degree of Supervision Received

Generally the degree to which you will be supervised depends on the degree of independence in performance of duties, which may be a set standard, the usual proximity of the supervisor, and the degree to which productivity is monitored. The degree of supervision may be low on some jobs, high on others, or may even vary on a particular job.

#### Contact With the Public and/or Coworkers

Contact with the public generally relates to the frequency of interaction with customers, clients, students, and others not directly working for the same employer. The amount of contact you may have or wish to have with workers in similar positions is another factor to consider, though this may vary with the size of the workplace.

#### Health and Safety Considerations

In virtually all jobs there are potential hazards; therefore, safeguards must be observed and precautions taken to avoid accidents, injuries, and possibly death. In some occupations, however, there are inherent risks to the health and safety of workers due to the nature of the job. While some risks are apparent, others are not. Also, some jobs that are mostly sedentary may cause discomfort, as may some jobs that require a lot of standing, walking, or physical activity. It is important to identify health and safety risks when you are evaluating an occupation, even though the hazards or risks might not deter your decision to enter an occupation.

In analyzing working conditions, check the health and safety hazards in offices as well as in factories where you may tend to expect them. The most prevalent is stress. All jobs contain some degree of stress, but the highest rates of stress-related disorders and diseases are in occupations with heavy workloads and responsibilities, but little control over the scheduling and pace of work. Nurses, assemblyline workers, and operators of video display terminals (VDT's) often face high levels of stress, for example. Results of prolonged stress can range from sleeplessness to heart disease.

Other health and safety problems can be found in both traditional and pathbreaking occupations. Accidents and injuries can happen to a coal miner or to a bookkeeper whose heavy ledgerbook falls off a shelf. More commonly, you may encounter minor aches and pains or fatigue on a job that involves much standing, bending, lifting, carrying, or even sitting.

Some occupations carry the danger of exposure to radiation, toxic substances, or infection. Some dangers you may be aware of, such as those from chemicals in computer chip manufacturing or from burns or freezing in

food processing. Others may surprise you, such as those associated with typewriter correction fluid, cleaning chemicals, or asbestos insulation in buildings. Finally, any occupation with public contact, especially in health and working with children, carries the risk of catching colds and other communicable diseases.

Technological developments have raised new health questions. There is debate over the health and safety of some new computer-related occupations. Prolonged VDT use has been associated with backaches, eyestrain, and headaches. Equipment design and installation can make a big difference, as can proper lighting, chairs, and breaks from working at the terminal. Questions have also been raised about VDT radiation and whether it may lead to birth defects. If you are planning to work extensively with VDT's, see Part 3 of this booklet for a listing of resources on health and safety in the workplace. See also the reference "A Working Woman's Guide to Her Job Rights" for information on laws and regulations covering occupational safety and health.

Part 2

SELECTED OCCUPATIONS EVALUATED



SELECTED OCCUPATIONS  
THAT GENERALLY REQUIRE A HIGH SCHOOL DIPLOMA

- o Appliance/Power Tool Repairer
- o Bank Teller
- o Busdriver
- o Computer Operator
- o Cook/Chef
- o Firefighter
- o Office/Business Machine Repairer
- o Police Officer
- o Real Estate Agent and Broker
- o Secretary



## APPLIANCE/POWER TOOL REPAIRER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mechanical aptitude; eye/hand coordination; concentration, attention to detail; outgoing personality.

Training Requirements: Up to 3 years on-the-job training; need background in electrical or mechanical repair to obtain trainee job. Usually specialize in either portable or major appliances.

Availability of Training: Public high schools and vocational education programs; private, specialized voc. ed. schools; junior and community colleges; on-the-job training.

Training Costs: Range from none to \$100-\$400 per quarter.

Salary Range, 1984: Weekly earnings from less than \$180 to more than \$560.

Career Mobility: In large shop can be promoted to supervisor, assistant manager, service manager. Need to demonstrate ability to get along with customers and coworkers. Can open own appliance store or repair shop with funds/credit.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 83,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services.

Occupational Interest Groups: International Brotherhood of Electrical Workers.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays).

Degree of Supervision Received: Low.

Contact With--  
Public: High.  
Coworkers: Varies.

Health and Safety Considerations: Handling electrical parts and lifting or moving large appliances and power tools require special safety precautions.

## BANK TELLER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mathematical aptitude; outgoing personality; neat appearance.

Training Requirements: High school diploma preferred but not essential. On-the-job training lasts from a few days to several weeks; often trained by experienced workers.

Availability of Training: On-the-job training.

Training Costs: None.

Salary Range, 1984: Annual earnings from about \$8,000 to \$17,200.

Career Mobility: For management positions, usually need specialized training or bachelor's degree. Consider mobility to other bank positions; analysis/audit/payroll clerks, etc., have greater control over schedule and physical mobility, less direct supervision. Experienced tellers can become head tellers--limited job ladder.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 493,000.

Projected Growth, 1984-1995: Slower than the average for all occupations.  
(See Part 1, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Finance, insurance, and real estate.

Occupational Interest Groups: 9 to 5, National Association of Working Women; National Association of Bank Women; American Bankers Association.

### WORKING CONDITIONS

Traditional/Pathbreaking: Traditional for all women.  
(See Part 1, section on "Working Conditions," for explanation of categories.)

Work Schedules: Most are regular (35-40 hours a week, weekdays); some are part time, evenings, and weekends.

Degree of Supervision Received: High.

Contact With--  
Public: High.  
Coworkers: High.

Health and Safety Considerations: Standing for long periods of time in a confined area is a usual working condition.



## BUSDRIVER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Eye/hand coordination; good judgment, independent decisionmaking; patience; outgoing personality.

Training Requirements: Local transit, intercity, or school busdrivers usually must be 21 yrs. old with high school diploma or equivalent; must pass physical exam and written test. Employer usually provides several weeks of combined classroom and road instruction. Will need commercial driver's permit or special school bus license; may have to meet other Federal and State requirements.

Availability of Training: On-the-job training.

Training Costs: None.

Salary Range, 1984: Weekly earnings from less than \$150 to more than \$485.

Career Mobility: Usually begin on "extra" list; temporary assignments/substitutions; may take several yrs. for regular route. Runs are assigned by seniority. Can become dispatcher or supervisor. Since many of the positions are civil service, promotions are determined by competitive exams. Limited opportunities for promotion.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 459,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part 1, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Public administration; transportation, communications, and other public utilities.

Occupational Interest Groups: Amalgamated Transit Union; American Public Transit Association; Transport Workers Union of America.

### WORKING CONDITIONS

Traditional/Fathbreaking: Women as a group are represented about proportionally to their percentage in the labor force.  
(See Part 1, section on "Working Conditions," for explanation of categories.)

Work Schedules: Shifts, which may include evenings, late nights, weekends on regular basis; part time; overtime.

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: Low.

Health and Safety Considerations: Stress and fatigue may result from constant driving through heavy traffic and trying to accommodate passengers.

## COMPUTER OPERATOR



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Concentration, attention to detail; logic and reasoning; patience; organizational skills, systematic procedures.

Training Requirements: Some employers recruit from data processing classes, but workers may be trained on the job; console operators require most training. Avoid training on obsolete equipment, such as keypunch systems.

Availability of Training: Public high schools and vocational education programs; private, specialized voc. ed. schools; junior and community colleges.

Training Costs: Range from none to several thousand dollars.

Salary Range, 1984: Weekly earnings from about \$185 to more than \$540.

Career Mobility: Can move from data entry positions to console operator. Possible advancement to supervisory positions, but some junior or community college may be necessary. Need additional training, usually a bachelor's degree, to move to programming positions.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 311,000. (Includes computer and peripheral equipment operators; 324,000 data entry keyers comprise a separate occupation.)

Projected Growth, 1984-1995: Much faster than the average for all occupations. (Little change expected for data entry keyers.)  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Public administration; finance, insurance, and real estate; services.

Occupational Interest Groups: None identified.

### WORKING CONDITIONS

Traditional/Pathbreaking: Women as a group are represented in a proportion somewhat higher than their percentage in the labor force.

(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); shifts, including evenings and weekends on regular basis; part time.

Degree of Supervision Received: High (less for console operators).

Contact With--

Public: Low.

Coworkers: High.

Health and Safety Considerations: Sitting for long periods and noisy environment may be factors. Operators who work with video display terminals may experience stress and eyestrain.

## COOK/CHEF



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Physical strength; manual dexterity; organizational skills; systematic procedures.

Training Requirements: Vary from short-order cook to executive chef; growing trend to hire persons trained at trade schools; vocational programs and community colleges; apprenticeship (3 yrs.) offered by American Culinary Federation; can also start as "unskilled" kitchen help.

Availability of Training: Public high schools and vocational education programs; private, specialized voc. ed. schools; junior and community colleges; on-the-job training.

Training Costs: None for on-the-job training. Costs range from \$900 a year at community and vocational colleges to \$6,000 at culinary institutes.

Salary Range, 1984: Salaries vary widely depending on establishment. Annual earnings from about \$7,600 to more than \$17,000. Workers with special skills and high reputation may earn \$40,000 or more in noted establishments.

Career Mobility: Can move to larger establishment and can build skills by working at different establishments. Some cooks become chefs or move into supervisory positions and on to restaurant manager. Can go into own business with funds/credit.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 1,309,000.

Projected Growth, 1984-1995: Faster than the average for all occupations.

(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services.

Occupational Interest Groups: Hotel and Restaurant Employees International Union; American Culinary Federation.

### WORKING CONDITIONS

Traditional/Pathbreaking: Traditional for black women; Hispanic women and women as a group are represented in proportions that equal their proportions in the labor force. (See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Shifts, which include evenings, late nights, weekends on regular basis.

Degree of Supervision Received: Varies.

Contact With--

Public: Low.

Coworkers: High.

Health and Safety Considerations: Burns and cuts are hazards. Standing for long periods, lifting heavy cooking equipment, and working near hot ovens require precautions to prevent injuries.

## FIREFIGHTER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mechanical aptitude; physical strength; good judgment; independent decisionmaking; outgoing personality.

Training Requirements: Must be at least 18 yrs. old and high school graduate; must pass written test; medical exam; tests of strength, stamina, and agility. Military service or volunteer experience a plus; training in firefighting school lasts several weeks. Some departments offer accredited apprentice programs lasting 3-4 years.

Availability of Training: On-the-job training.

Training Costs: None.

Salary Range, 1984: Annual salaries averaged from about \$17,300 to \$22,300. The average annual salary for officers ranged upward to about \$32,300.

Career Mobility: Usually advance rank with experience, first eligible after 3-5 years for lieutenant, then captain, battalion chief, assistant chief, deputy chief, chief; promotions based on seniority, performance, and scores on written exams.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 308,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Public administration.

Occupational Interest Groups: International Association of Firefighters, AFL-CIO; International Association of Fire Chiefs; International Association of Black Professional Fire Fighters.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Shifts, which include evenings, late nights, and weekends on a regular basis; overtime.

Degree of Supervision Received: High when firefighting; less at other times.

Contact With--

Public: Varies.

Coworkers: High.

Health and Safety Considerations: Involves risk of injury from fire and smoke, building cave-ins, and contact with harmful gases and chemicals.

## OFFICE/BUSINESS MACHINE REPAIRER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mechanical aptitude; mathematical aptitude; eye/hand coordination; manual dexterity; outgoing personality; neat appearance.

Training Requirements: High school is a minimum but some employers want 1 year additional technical training in electricity/electronics; trained by employer in special schools (manufacturers) or on-the-job (independent repair shops); 1-3 years before fully qualified.

Availability of Training: Public high schools and vocational education programs; junior and community colleges; on-the-job training.

Training Costs: Generally none at vocational or technical schools.

Salary Range, 1984: Weekly earnings from about \$200 to \$720.

Career Mobility: Can increase pay by knowing how to repair more than one type of machine; can advance to supervisor, service manager, or manufacturers' sales jobs. Can open own repair shop or independent dealership, or buy franchise from manufacturer.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 53,000.

Projected Growth, 1984-1993: Faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services.

Occupational Interest Groups: Computer and Business Equipment Manufacturers Association (has general information about the work of repairers).

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays).

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: Low, unless in shop.

Health and Safety Considerations: No significant hazards.

## POLICE OFFICER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Physical strength; good judgment, independent decisionmaking; outgoing personality; diplomacy.

Training Requirements: Requirements vary for Federal, State, or local positions. Generally, must be U.S. citizen, 21 yrs. old or older; pass written exam, test of strength and agility, psychological testing. A few cities require some college classes in law enforcement; some cities hire high school graduates as civilian cadets, who take classes while doing clerical work.

Availability of Training: On-the-job training; junior or community college; 4-year college or university.

Training Costs: None if on-the-job training; about \$700 tuition for private school; less for community college.

Salary Range, 1984: Average annual earnings from about \$18,000 for patrol officers to \$30,900 for police and detective lieutenants.

Career Mobility: Usually begin on patrol duty and become eligible for promotion after gaining experience; promotions based on seniority, performance, scores on exams. Associate or bachelor's degree in law enforcement or justice helps in gaining promotions. Degrees offered for careers in police science or public administration.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 520,000 (police and detectives).

Projected Growth, 1984-1995: About as fast as the average for all occupations.

(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Public administration.

Occupational Interest Groups: Fraternal Order of Police; National Police Officers Association; American Federation of Police; National Black Police Association; Afro-American Police League; International Association of Women Police.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.

(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Shifts, which include evenings, late nights, weekends on regular basis; overtime.

Degree of Supervision Received: Varies.

Contact With--

Public: High.

Coworkers: High.

Health and Safety Considerations: May require outdoor work in inclement weather; involves risk of injury when apprehending criminals and handling various types of disorders.

## REAL ESTATE AGENT AND BROKER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; mathematical aptitude; good judgment, independent decisionmaking; concentration, attention to detail; patience; outgoing personality; neat appearance; diplomacy.

Training Requirements: State license; must be at least 18 yrs. old and high school graduate, pass written exam; exam to become broker more comprehensive; requires 30 hours classroom instruction for agents, 90 hours and 1-3 years experience for broker; experience may be waived for bachelor's degree in real estate.

Availability of Training: On-the-job training; junior and community colleges; 4-year colleges and universities.

Training Costs: \$100-\$200 for class to obtain license; after that, if employed by major company, employer may bear most costs.

Salary Range, 1984: Most agents work for commissions and are not salaried. Median annual income for full-time agents was about \$19,000; for brokers, \$31,600.

Career Mobility: In large firms, agents can become sales or general manager; agents may also become brokers (advanced courses offered by National Association of Realtors); can move to real estate appraisal or property management. Brokers may open own office.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 363,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Finance, insurance, and real estate.

Occupational Interest Groups: National Association of Realtors; National Association of Real Estate Brokers.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for black and Hispanic women; women as a group are represented about proportionally to their percentage in the labor force.

(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Part time (decreasing); overtime.

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: Varies.

Health and Safety Considerations: No significant hazards.

## SECRETARY



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; manual dexterity; good judgment; independent decisionmaking; concentration, attention to detail; outgoing personality; neat appearance; diplomacy; organizational skills, systematic procedures.

Training Requirements: High school diploma, but requirement for at least some college is on the rise. Typing emphasized in training, but only 20 percent of job duties, on average; shorthand is rarely used but may be entry requirement; knowledge of English grammar and office procedures.

Availability of Training: Public high schools and vocational education programs; private, specialized voc. ed. schools; junior and community colleges.

Training Costs: None for high school business classes to up to \$5,000 for programs by private schools, which usually include placement.

Salary Range, 1984: Average annual earnings from about \$11,400 to \$21,500.

Career Mobility: May move to administrative assistant, clerical or secretarial supervisor, or office manager. Bachelor's degree or courses in management, accounting, or budgeting could lead to other low-level management positions. New technologies like word processing are increasingly important for job mobility.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 2,797,000 (does not include 239,000 workers classified as stenographers or 991,000 workers classified as typists/word processors).

Projected Growth, 1984-1995: Slower than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: All sectors but greatest in public administration; services; and finance, insurance, and real estate.

Occupational Interest Groups: Professional Secretaries International; 9 to 5, National Association of Office Workers; National Association of Legal Secretaries (International).

### WORKING CONDITIONS

Traditional/Pathbreaking: Traditional for Hispanic women and for all women as a group; the proportion of black women in the occupation is about equal to their proportion in the labor force.

(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); part time.

Degree of Supervision Received: Varies.

Contact With--

Public: High.

Coworkers: Varies, especially with size of office.

Health and Safety Considerations: Long periods of work at video display terminals may be associated with eyestrain, musculoskeletal strain, and stress.



SELECTED OCCUPATIONS  
THAT GENERALLY REQUIRE AN ASSOCIATE DEGREE

- o Computer Service Technician
- o Dental Hygienist
- o Drafter
- o Legal Assistant (Paralegal)
- o Physician Assistant
- o Radio/Television Service Technician
- o Registered Nurse



## COMPUTER SERVICE TECHNICIAN



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mechanical aptitude; eye/hand coordination; concentration, attention to detail; patience; outgoing personality; neat appearance; logic and reasoning.

Training Requirements: 1-2 years post-high school electronics or electrical training usually necessary to be hired as trainee; then trained by employer, including classroom instruction and working with experienced technicians.

Availability of Training: Public high schools and vocational education programs; private, specialized voc. ed. schools; junior and community colleges; on-the-job training.

Training Costs: Range from \$1,000 to several thousand dollars.

Salary Range, 1984: Weekly earnings from less than \$270 to over \$740.

Career Mobility: May become supervisor or service manager. A few technicians move into equipment sales or programming, but need additional training in specific skills like programming; may need bachelor's degree.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 50,000.

Projected Growth, 1984-1995: Much faster than the average for all occupations.

(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services; manufacturing.

Occupational Interest Groups: None identified.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.

(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); shifts, which include evenings, late nights, weekends on regular basis; overtime.

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: Low.

Health and Safety Considerations: Hazards include minor burns and electrical shock.

## DENTAL HYGIENIST



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Eye/hand coordination; manual dexterity; concentration, attention to detail; outgoing personality.

Training Requirements: To obtain license, must graduate from accredited dental hygiene program and pass written and clinical exam; most degree programs offer associate degree but some offer bachelor's and master's. To get into degree program need high school diploma and score on aptitude test given by American Dental Hygienists' Association.

Availability of Training: Private, specialized vocational educational schools; junior and community colleges; 4-year colleges and universities.

Training Costs: Costs of programs vary widely, from under \$1,000 at some junior colleges to over \$6,000 at private schools.

Salary Range, 1984: Median hourly earnings about \$11.

Career Mobility: Limited mobility without additional education. Need bachelor's degree for public or school health programs, master's degree for teaching or administration. Private dental office requires least education.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 76,000.

Projected Growth, 1984-1995: Faster than the average for all occupations.  
(See Part 1, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services; public administration.

Occupational Interest Groups: American Dental Hygienists' Association.

### WORKING CONDITIONS

Traditional/Pathbreaking: Traditional for women as a group; pathbreaking for black and Hispanic women.  
(See Part 1, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); part time; some evenings and weekends.

Degree of Supervision Received: Varies.

Contact With--

Public: High.

Coworkers: Varies.

Health and Safety Considerations: Protective procedures must be followed in the constant use of X-ray equipment.

## DRAFTER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Eye/hand coordination; manual dexterity; concentration, attention to detail; patience.

Training Requirements: Courses in mathematics, physical sciences, mechanical drawing, and drafting; shop practice helpful; knowledge of computer-aided systems is increasingly needed; some 3-4 year apprenticeships available.

Availability of Training: Public high schools and vocational education programs; private, specialized voc. ed. schools; junior and community colleges; on-the-job training.

Training Costs: Range is from none to variable tuitions.

Salary Range, 1984: Annual earnings from less than \$12,000 to more than \$33,000.

Career Mobility: May start as junior drafter, then advance to checker, detailer, senior drafter, and supervisor. With skills, can train in architecture or engineering; need bachelor's degree.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 345,000.

Projected Growth, 1984-1995: Slower than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services; manufacturing.

Occupational Interest Groups: American Institute for Design and Drafting.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays).

Degree of Supervision Received: High.

Contact With--

Public: Low.

Coworkers: High.

Health and Safety Considerations: Sitting at drawing board or computer terminal for long periods of concentration to details could lead to eyestrain and back discomfort.

## LEGAL ASSISTANT (PARALEGAL)



### COSTS AND BENEFITS

**Skills Needed/Personality Traits Desired:** Written/oral communication; research skills; good judgment; independent decisionmaking; concentration, attention to detail; patience; neat appearance; logic and reasoning; organizational skills, systematic procedures.

**Training Requirements:** Background in legal terminology; formal training is replacing on-the-job training as field gets more competitive; experience as legal secretary or other legal experience may help; programs may last a few weeks (intensive) or 4 years, but most are 2 years leading to certificate or associate degree.

**Availability of Training:** Private, specialized vocational education programs; junior and community colleges; 4-year colleges and universities.

**Training Costs:** Costs of programs vary widely; precise costs not available.

**Salary Range, 1984:** Annual average from \$14,400 to \$27,700.

**Career Mobility:** Since managers are usually lawyers, mobility is limited; some firms have supervisory positions that can be reached by promotion. Paralegals with a bachelor's degree who seek legal experience before law school can crowd out those from associate programs. Can become claims or title examiner or legal investigator.

### JOB AVAILABILITY

**Number of Women and Men Employed, 1984:** 53,000.

**Projected Growth, 1984-1995:** Much faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

**Industry Concentration:** Services; public administration.

**Occupational Interest Groups:** National Association of Legal Assistants; Standing Committee on Legal Assistants (American Bar Association); National Federation of Paralegal Associations.

### WORKING CONDITIONS

**Traditional/Pathbreaking:** Traditional for women as a group; black and Hispanic women are represented in proportions that are about equal to their proportions in the labor force.  
(See Part I, section on "Working Conditions," for explanation of categories.)

**Work Schedules:** Regular (35-40 hours a week, weekdays); overtime.

**Degree of Supervision Received:** Varies.

**Contact With--**

**Public:** Varies.

**Coworkers:** Varies.

**Health and Safety Considerations:** No significant hazards, although if working for long periods under pressure of deadlines, effects of stress could result.

## PHYSICIAN ASSISTANT



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Eye/hand coordination; manual dexterity; good judgment; independent decisionmaking; concentration; attention to detail; patience; diplomacy; logic and reasoning; organizational skills; systematic procedures.

Training Requirements: Most programs are 2 years; entry is competitive and requirements vary from high school diploma to bachelor's degree—usually 2 or more years of college-level courses in science or health professions and/or prior clinical experience. Many States now require certification and regular recertification.

Availability of Training: Junior and community colleges; 4-year colleges and universities; medical schools; some hospitals.

Training Costs: Vary from free education by military to \$10,000 a year.

Salary Range, 1984: Annual salaries from about \$17,000 to \$39,000.

Career Mobility: Career ladders are still emerging, since the occupation developed fairly recently. Can move from clinical work to administrative, but master's degree in public health or public administration helpful.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 25,000.

Projected Growth, 1984-1995: Much faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services.

Occupational Interest Groups: American Academy of Physician Assistants; National Committee of Physician Assistants; Association of Physician Assistant Programs.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for Hispanic women; black women and women as a group are represented in proportions that are about equal to their proportions in the labor force.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); shifts, which include evenings and weekends; overtime.

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: Varies.

Health and Safety Considerations: Must follow safeguards against infectious diseases.

## RADIO/TELEVISION SERVICE TECHNICIAN



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mechanical aptitude; eye/hand coordination; manual dexterity; concentration, attention to detail; outgoing personality; logic and reasoning.

Training Requirements: Training includes courses in math, physics, schematic reading, electricity, and practical experience; usually takes 1-2 years but some formal apprenticeships take 3-4 years; some States require passing a licensing exam. Also qualified to repair stereo components, tape and video cassette recorders, video games, home security systems, and other electronics products.

Availability of Training: Private, specialized vocational education schools; junior and community colleges.

Training Costs: Range from none to several thousand dollars.

Salary Range, 1984: Weekly earnings from about \$260 to \$520.

Career Mobility: In large repair shop, can become supervisor or service manager; with training in engineering and math can become electronics "troubleshooter." More than one-third are self-employed, which indicates opportunities are good for owning business; need funds and may need classes in business administration.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 52,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services.

Occupational Interest Groups: International Brotherhood of Electrical Workers; National Association of Television and Electronic Servicers of America.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); some evenings and weekends.

Degree of Supervision Received: Low.

Contact With--  
Public: High.  
Coworkers: Varies.

Health and Safety Considerations: Hazards include electrical shock and strains from lifting and carrying heavy equipment.



## REGISTERED NURSE



### COSTS AND BENEFITS

**Skills Needed/Personality Traits Desired:** Eye/hand coordination; physical strength; good judgment; independent decisionmaking; supervisory skills; concentration, attention to detail; patience; outgoing personality; diplomacy; organizational skills, systematic procedures.

**Training Requirements:** Must pass State Board exam and be licensed to practice. Three types of preparatory programs are: 2-year community and junior college, generally leading to staff nurse positions providing bedside care; 4-year bachelor's degree programs leading to clinical specializations, administration, research, and education; 3-year diploma programs in hospital-based schools—on the decline.

**Availability of Training:** Junior and community colleges; 4-year colleges and universities.

**Training Costs:** Range from \$2,000 a year to over \$10,000.

**Salary Range, 1984:** Annual earnings from about \$15,000 to more than \$31,000.

**Career Mobility:** Type of degree program will affect opportunities for mobility; difficult to transfer credit from one type of program to another. Graduates of bachelor's programs and those with advanced degrees can move into administration, teaching, or research; master's degree in nursing, public health, or public administration can help ensure upward mobility.

### JOB AVAILABILITY

**Number of Women and Men Employed, 1984:** 1,377,000.

**Projected Growth, 1984-1995:** Much faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

**Industry Concentration:** Services.

**Occupational Interest Groups:** American Nurses' Association; National League for Nursing; National Black Nurses Association.

### WORKING CONDITIONS

**Traditional/Pathbreaking:** Traditional for women as a group; black and Hispanic women are represented in proportions about equal to their proportions in the labor force.  
(See Part I, section on "Working Conditions," for explanation of categories.)

**Work Schedules:** Shifts, which include evenings, late nights, weekends on regular basis; part time; overtime.

**Degree of Supervision Received:** Varies.

**Contact With--**

**Public:** High.

**Coworkers:** High.

**Health and Safety Considerations:** Demands of job can be strenuous; considerable walking and standing; exposure to infectious diseases.



SELECTED OCCUPATIONS  
THAT GENERALLY REQUIRE A BACHELOR'S DEGREE

- o Accountant/Auditor
- o Chemist
- o Computer Programmer
- o Computer Systems Analyst
- o Engineer
- o Personnel and Labor Relations Specialist
- o Underwriter



## ACCOUNTANT/AUDITOR



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; mathematical aptitude; good judgment; independent decisionmaking; concentration; attention to detail; patience; supervisory skills; logic and reasoning; organizational skills; systematic procedures.

Training Requirements: Degree in accounting or closely related field; master's degree sometimes preferred; junior accounting positions possible with associate degree. Computer training is increasingly important; internships and work experience while in school are advantages in finding good positions.

Availability of Training: Private, specialized vocational education schools; 4-year colleges and universities.

Training Costs: Tuition may range from \$1,000 to \$7,000 a year.

Salary Range, 1984: Annual salaries from about \$17,000 to more than \$70,000 (chief managers).

Career Mobility: Usually start in assistant or junior accounting positions and move to more responsible jobs. Management accountants can move into financial management of firm (e.g.: controller, treasurer, financial vice president). Public accountants can open own business. License as Certified Public Accountant (CPA) is considered high credential.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 882,000.

Projected Growth, 1984-1995: Much faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: All sectors.

Occupational Interest Groups: American Institute of Certified Public Accountants; National Association of Accountants; National Society of Public Accountants; National Association of Black Accountants.

### WORKING CONDITIONS

Traditional/Pathbreaking: All women are represented in proportions that are about equal to their proportions in the labor force.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); part time; overtime.

Degree of Supervision Received: Low.

Contact With--

Public: Low (management accountant). High (public accountant).

Coworkers: Varies.

Health and Safety Considerations: No significant hazards.

## CHEMIST



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mathematical aptitude; manual dexterity; research skills; good judgment, independent decisionmaking; concentration, attention to detail; patience; logic and reasoning; eye/hand coordination; organizational skills, systematic procedures.

Training Requirements: Undergraduate degree in chemistry or related field for entry-level positions; good laboratory skills; classes in mathematics, physics, and liberal arts; on-the-job training will supplement academic work.

Availability of Training: 4-year colleges and universities.

Training Costs: Tuition ranges from about \$3,000 to \$9,000 a year.

Salary Range, 1984: Average annual salary from more than \$14,000 to more than \$63,000.

Career Mobility: Without graduate degree, difficult to advance, especially into research, administration, or teaching. Entry jobs primarily in private industry, assisting senior chemists in developing new products. Can teach at high school level; with master's, at 2-year and occasionally 4-year colleges; Ph.D. is norm for colleges and universities. With engineering degree, can become chemical engineer.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 85,000.

Projected Growth, 1984-1995: Slower than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Manufacturing.

Occupational Interest Groups: American Chemical Society.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays).

Degree of Supervision Received: Varies.

Contact With--

Public: Low.

Coworkers: Varies.

Health and Safety Considerations: Exposure to certain chemicals requires taking special precautions.

## COMPUTER PROGRAMMER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Mathematical aptitude; good judgment, independent decisionmaking; concentration, attention to detail; patience; logic and reasoning; organizational skills, systematic procedures.

Training Requirements: Combination of courses in computer programming and data processing with courses in subject specialization of either science, engineering, or business; bachelor's degree is especially important for science/engineering applications.

Availability of Training: Private, specialized vocational education programs; public voc. ed. programs; junior and community colleges; 4-year colleges and universities.

Training Costs: Tuition costs may range up to \$7,000 a year.

Salary Range, 1984: Weekly earnings from less than \$285 to more than \$780.

Career Mobility: With experience, can move from applications programmer to systems programmer. Programming experience is important background for becoming systems analyst; can also move into managerial positions but may need courses in management.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 341,000.

Projected Growth, 1984-1995: Much faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Manufacturing; services; public administration.

Occupational Interest Groups: Association for Women in Computing; Association for Information Systems Professionals.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for Hispanic women; black women and women as a group are represented in proportions that are about equal to their proportions in the labor force.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); shifts, which include evenings and weekends; overtime.

Degree of Supervision Received: Varies.

Contact With--

Public: Low.

Coworkers: High.

Health and Safety Considerations: No significant hazards.

## COMPUTER SYSTEMS ANALYST



### COSTS AND BENEFITS

**Skills Needed/Personality Traits Desired:** Written/oral communication; mathematical aptitude; good judgment; independent decisionmaking; supervisory skills; concentration, attention to detail; patience; diplomacy, logic and reasoning; organizational skills, systematic procedures.

**Training Requirements:** Degree in computer science, information systems, business or related mathematics/science/engineering field, plus experience as a programmer. Some employers require master's degree. Generally specialize in either business or scientific/engineering applications.

**Availability of Training:** 4-year colleges and universities; later on-the-job training is often essential.

**Training Costs:** Tuition costs may range up to \$7,000 a year.

**Salary Range, 1984:** Weekly earnings from less than \$345 to more than \$870.

**Career Mobility:** In large departments can move from junior systems analyst to senior or lead systems analyst; may move to managerial jobs within department; more difficult to move into non-technical management.

### JOB AVAILABILITY

**Number of Women and Men Employed, 1984:** 308,000.

**Projected Growth, 1984-1995:** Much faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

**Industry Concentration:** Manufacturing; public administration; finance, insurance, and real estate.

**Occupational Interest Groups:** Association for Systems Management.

### WORKING CONDITIONS

**Traditional/Pathbreaking:** Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

**Work Schedules:** Regular (35-40 hours a week, weekdays); overtime.

**Degree of Supervision Received:** Low.

**Contact With--**

**Public:** Varies.

**Coworkers:** Varies.

**Health and Safety Considerations:** No significant hazards.



## ENGINEER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; mechanical aptitude; mathematical aptitude; research skills; good judgment, independent decisionmaking; concentration, attention to detail; eye/hand coordination; manual dexterity; logic and reasoning; organizational skills, systematic procedures.

Training Requirements: Standard entry requirement is bachelor's degree in engineering; degree in science and mathematics may also qualify for some jobs. Some specialties require a graduate degree and some fields require licensing. The length of engineering programs vary.

Availability of Training: 4-year colleges and universities.

Training Costs: Tuition costs range up to about \$10,000 a year.

Salary Range, 1984: Annual salaries from over \$18,000 to more than \$76,000.

Career Mobility: Assigned greater responsibility and given more complex assignments as experience is gained. Possible to move into managerial or administrative positions within engineering or nontechnical fields; graduate degree or courses in business administration may help. With law degree, excellent background for patent attorney (high paying field).

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 1,331,000.

Projected Growth, 1984-1995: Much faster than the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Manufacturing.

Occupational Interest Groups: Society of Women Engineers; Engineering Manpower Commission of the Americas; National Society of Professional Engineers.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); overtime.

Degree of Supervision Received: Varies.

Contact With--  
Public: Low.  
Coworkers: High.

Health and Safety Considerations: Potential hazards vary widely with specialization.

## PERSONNEL AND LABOR RELATIONS SPECIALIST



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; research skills; supervisory skills; good judgment; independent decisionmaking; patience; diplomacy; outgoing personality.

Training Requirements: Bachelor's is standard degree but not essential. Can be in specialized field (personnel administration, industrial & labor relations) or relevant liberal arts field (psychology, sociology, counseling, education). Labor relations work may require graduate work in the field, MBA, or law degree, especially for contract negotiations.

Availability of Training: 4-year colleges and universities.

Training Costs: Tuition for liberal arts bachelor's degree ranges from \$3,000 to \$9,000 a year.

Salary Range, 1984: Annual salaries from over \$14,000 to nearly \$66,000 (personnel directors).

Career Mobility: Difficult to move beyond middle ranks of large organization or head of small firm—openings are few. Some people move from personnel to labor relations but shift is for labor relations specialists to enter field directly. Economics or business background, or master's or law degree may help with advancement.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 198,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: All sectors.

Occupational Interest Groups: American Society for Personnel Administration.

### WORKING CONDITIONS

Traditional/Pathbreaking: All women are represented in proportions that are about equal to their proportions in the labor force.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); overtime.

Degree of Supervision Received: Low.

Contact With--

Public: Low.

Coworkers: High.

Health and Safety Considerations: No significant hazards.

## UNDERWRITER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; mathematical aptitude; good judgment, independent decisionmaking; concentration, attention to detail.

Training Requirements: Bachelor's degree in liberal arts or business administration; major not significant; some companies hire people without a degree as trainees or promote underwriting clerks who show aptitude.

Availability of Training: 4-year colleges and universities.

Training Costs: Tuition for liberal arts undergraduate degree ranges from \$3,000 to \$9,000.

Salary Range, 1984: Median annual salary from \$21,200 to \$37,000.

Career Mobility: Mainly within underwriting track; can be promoted to chief underwriter or underwriting manager; some underwriters are promoted into general management. Many opportunities available for continuing education and certification within field; credentials may count toward advancement.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 78,000.

Projected Growth, 1984-1995: Faster than the average for all occupations.  
(See Part 1, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Finance, insurance, and real estate.

Occupational Interest Groups: National Association of Life Underwriters; American Society of Chartered Life Underwriters; National Association of Health Underwriters; APIW (formerly Assoc. of Professional Insurance Women); National Association of Insurance Women; Women Life Underwriters Conference.

### WORKING CONDITIONS

Traditional/Pathbreaking: All women are represented in proportions that are about equal to their proportions in the labor force.  
(See Part 1, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays).

Degree of Supervision Received: High.

Contact With--

Public: High.

Coworkers: High.

Health and Safety Considerations: No significant hazards.



SELECTED OCCUPATIONS  
THAT GENERALLY REQUIRE AN ADVANCED DEGREE

- o Economist
- o Health Services Administrator
- o Lawyer
- o Physician
- o Social Worker
- o Speech Pathologist/Audiologist



## ECONOMIST



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; mathematical aptitude; research skills; good judgment; independent decisionmaking; concentration, attention to detail; patience; logic and reasoning; organizational skills, systematic procedures.

Training Requirements: Graduate degree increasingly needed for most economist positions, although people with bachelor's degree can find jobs in business and government. Background should include economic theory, mathematical methods, statistical procedures, and computer applications.

Availability of Training: 4-year colleges and universities.

Training Costs: Up to \$8,300 a year tuition.

Salary Range, 1984: Median annual earnings from about \$16,000 to more than \$52,000.

Career Mobility: With master's degree can move into administration, research and planning in public and private sectors; Ph.D. degree may be necessary to advance to top positions. In academia, it is increasingly difficult to obtain tenure without doctoral degree. Background in marketing or finance may be advantage for promotions in private sector.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 38,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services; public administration.

Occupational Interest Groups: American Economic Association; National Economic Association; National Association of Business Economists.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for Hispanic women; black women and women as a group are represented in proportions that are about equal to their proportions in the labor force.

Work Schedules: Regular (35-40 hours a week, weekdays); part time; overtime. Schedules more flexible in academia.

Degree of Supervision Received: Low.

Contact With--

Public: Varies.

Coworkers: Varies.

Health and Safety Considerations: No significant hazards.

## HEALTH SERVICES ADMINISTRATOR



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; mathematical aptitude; good judgment; independent decisionmaking; supervisory skills; patience; diplomacy; logic and reasoning; organizational skills; systematic procedures.

Training Requirements: Master's degree in health administration, hospital administration, public health, public administration, business administration, or personnel administration for entry. Training needs may vary by size of organization. Programs average 2 years beyond the bachelor's degree.

Availability of Training: 4-year colleges and universities.

Training Costs: Tuition averages are \$2,500 a year at public colleges and universities; \$5,800 a year at private institutions.

Salary Range, 1984: Salaries vary widely depending on size of hospital, clinic, or health care home. Average annual earnings of associate and chief administrators from about \$25,000 to almost \$120,000.

Career Mobility: Usually begin as dept. head, project director, program analyst, etc., in large institution; may move to more responsible positions within or to new employer; frequently can move to higher position in small institutions. Top positions in large facilities are rare, especially in prime locations. More opportunities are outside of hospitals (e.g., nursing homes).

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 336,000.

Projected Growth, 1984-1995: Faster than the average for all occupations.  
(See Part 1, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services; public administration.

Occupational Interest Groups: American Academy of Health Administration; Association of Academic Health Centers; National Association of Health Services; American College of Health Care Administrators.

### WORKING CONDITIONS

Traditional/Pathbreaking: All women are represented in proportions that are about equal to their proportions in the labor force.  
(See Part 1, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); overtime; evenings and weekends.

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: High.

Health and Safety Considerations: No significant hazards, although dealing with emergency situations and other demands of health care may require long hours and induce stress or fatigue.



## LAWYER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; research skills; diplomacy; logic and reasoning; good judgment, independent decisionmaking; organizational skills, systematic procedures.

Training Requirements: Must pass exam to be "admitted to the bar"; to qualify for bar exam usually must be graduate of accredited law school; sometimes grads of unaccredited schools who combine law school with study in law office or those with practical study alone can take exam (varies by State); bachelor's usually needed for entry to law school; most law programs are 3 years.

Availability of Training: 4-year colleges and universities.

Training Costs: Vary widely with institution; up to \$7,000 a year tuition.

Salary Range, 1984: Starting annual salary of recent graduates ranged from about \$10,000 in some public interest programs to more than \$40,000 in large law firms; average annual for experienced attorneys was nearly \$88,000.

Career Mobility: Usually start in salaried positions working for experienced lawyers or judges; may move to more responsible role in firm. Only 4 percent of law firm partners are women; still difficult to reach top. Chula stores are opening legal services and prepaid plans, like health plans, are developing—pay less than traditional firms. A few lawyers become judges.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 490,000.

Projected Growth, 1984-1995: Much faster than the average for all occupations.  
(See Part 1, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Services; public administration.

Occupational Interest Groups: American Bar Association; National Bar Association; National Association of Black Women Attorneys.

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.

(See Part 1, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); overtime.

Degree of Supervision Received: Low.

Contact With--

Public: Varies.

Coworkers: Varies.

Health and Safety Considerations: No significant hazards; however, may have long work hours and periods of heavy pressure, which could lead to stress or fatigue.

## PHYSICIAN



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; eye/hand coordination; manual dexterity; research skills; good judgment, independent decisionmaking; supervisory skills; concentration, attention to detail; patience; diplomacy; logic and reasoning; organizational skills, systematic procedures.

Training Requirements: Bachelor's, with premedical school requirements, followed by 4 years of medical school, 1 year internship, and 2-5 years residency for specialization and licensing.

Availability of Training: 4-year colleges and universities, then on-the-job training (internship and residency).

Training Costs: Tuition and fees may range from \$1,000 to \$18,750 a year; interns and residents earn salaries.

Salary Range, 1984: Varies with specialty, region, size of hospital. Stipends of residents varied but many ranged from \$20,000 to \$24,000; average income of physicians (all specialties) was \$108,400.

Career Mobility: Can move from small to large institution or to more prestigious position within an institution. Can move into medical administration, based more on experience than on additional training; can teach at a medical school. Private practice offers flexibility.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 476,000.

Projected Growth, 1984-1995: Faster than the average for all occupations.

Industry Concentration: Services.

Occupational Interest Groups: American Medical Association; National Medical Association. Specializations have their own associations (e.g.: American College of Family Physicians).

### WORKING CONDITIONS

Traditional/Pathbreaking: Pathbreaking for all women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); overtime; part time; shifts, including evenings, late nights, and weekends on regular basis. Schedules more flexible after training.

Degree of Supervision Received: Low (after residency).

Contact With--

Public: High.

Coworkers: High.

Health and Safety Considerations: Pressures of demanding workload could lead to fatigue; must follow safeguards against infectious diseases.

## SOCIAL WORKER



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communications; good judgment, independent decisionmaking; concentration, attention to detail; patience; outgoing personality; neat appearance; diplomacy; organizational skills; systematic procedures.

Training Requirements: Master's required for some entry positions and is necessary for advancement; can get experience in some case worker or group worker positions with bachelor's degree in social work or liberal arts field; half the States require licensing or registration. Graduate schools accept undergraduates with backgrounds in many disciplines.

Availability of Training: 4-year colleges and universities.

Training Costs: Tuition ranges upward from \$1,200 a year.

Salary Range, 1984: Average minimum salary for caseworkers with master's was about \$20,100; experienced workers averaged between \$25,500 and \$30,800.

Career Mobility: Can become supervisor, administrator, or director of agency or program; with Ph.D. degree can go into teaching, research, or consulting. Small but growing number of workers are in private practice (counseling). Courses or a degree in public health or business administration may assist in advancement.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 335,000.

Projected Growth, 1984-1995: Faster than the average for all occupations.

(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Public administration.

Occupational Interest Groups: National Association of Social Workers; National Association of Black Social Workers.

### WORKING CONDITIONS

Traditional/Pathbreaking: Traditional for black and Hispanic women; women as a group are represented about proportionally to their percentage in the labor force.

(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays); shifts, including evenings, late nights, and weekends on regular basis; part time; overtime.

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: Varies.

Health and Safety Considerations: No significant hazards; may have to handle emergency situations of clients at any time.

## SPEECH PATHOLOGIST/AUDIOLOGIST



### COSTS AND BENEFITS

Skills Needed/Personality Traits Desired: Written/oral communication; eye/hand coordination; good judgment; independent decisionmaking; concentration, attention to detail; patience; outgoing personality; logic and reasoning.

Training Requirements: Master's in speech language pathology or audiology is standard credential; bachelor's degree programs are preparation for graduate school or job as an aide or a technician; usually need a practice certificate (administered by State) to work in public schools; 31 States require a license to work outside of schools.

Availability of Training: 4-year colleges and universities.

Training Costs: Tuition averages from \$2,500 to \$5,800 a year.

Salary Range, 1984: Average annual salary from about \$20,000 to about \$35,000.

Career Mobility: Can advance to supervisory positions. Certificate of Clinical Competence, administered by the American Speech-Language-Hearing Association, can demonstrate skills for promotion.

### JOB AVAILABILITY

Number of Women and Men Employed, 1984: 47,000.

Projected Growth, 1984-1995: About as fast as the average for all occupations.  
(See Part I, section on "Job Availability," for explanation of job growth.)

Industry Concentration: Public administration; services.

Occupational Interest Groups: American Speech-Language-Hearing Association.

### WORKING CONDITIONS

Traditional/Pathbreaking: Traditional for women as a group; pathbreaking for black and Hispanic women.  
(See Part I, section on "Working Conditions," for explanation of categories.)

Work Schedules: Regular (35-40 hours a week, weekdays).

Degree of Supervision Received: Low.

Contact With--

Public: High.

Coworkers: Varies.

Health and Safety Considerations: No significant hazards.

Part 3

HOW TO RESEARCH AN OCCUPATION: RESOURCES



## HOW TO RESEARCH AN OCCUPATION: RESOURCES

To help you become your own investigator, selected lists of resources --both publications and organizations--are provided as guides for your research. Many of the publications listed are available in local public libraries as well as in college and university libraries; others may be obtained from the issuing agencies, or from the U.S. Government Printing Office if a Federal agency publication is for sale only. You should also seek additional and current resources at your libraries, bookstores, and local agencies. The sources provided here are not intended to comprise a comprehensive listing.

### Obtain Basic Sources of Information on Occupations and Occupationally Based Organizations

You can use the basic sources below to guide you to information on occupations that interest you. The directories and publications are listed alphabetically by title. Some of these guides, in addition to providing general information about an occupation, list organizations that have more details on particular occupations.

Employment and Earnings. Vol. 33, No. 1, January 1986. U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C. (The January issue for each year includes averages for the preceding year on numbers of persons employed by occupation, sex, race, and Hispanic origin.)

Encyclopedia of Associations. 19th edition. Gale Research Co., Detroit, Michigan, 1985.

Job Options for Women in the 80's. U.S. Department of Labor, Women's Bureau, Washington, D.C., 1980.

National Survey of Professional, Administrative, Technical, and Clerical Pay, 1984. U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C., 1984.

Occupational Outlook Handbook. 1986-87 edition. U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C., 1986. For sale by the U.S. Government Printing Office. (This handbook--522 pages--is a basic source of information on careers and job prospects. It provides detailed analyses of 200 occupations, describing job qualifications, where people work and what they do, and employment outlook. There are very brief descriptions for an additional 200 occupations.)

Occupational Projections and Training Data. U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C., 1986.

You can obtain information on the number of women and minorities in an occupation from the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor. Write to request specific information from the Current Population Survey. Since most published reports list either women or minorities, you

may need to ask for unpublished data to get information by race and sex.  
The address is:

Bureau of Labor Statistics  
U.S. Department of Labor  
441 G Street, N.W.  
Washington, D.C. 20212

Get Information About Job Trends and  
Possibilities in Your Geographical Area

You can turn to a number of sources to find out about job prospects in your locality. State employment security agencies publish reports on projected employment and other local labor market conditions. Another source, State occupational information coordinating committees (SOICC's), can assist you in your search for career information on job prospects in your State or local area. Consult your telephone directory for locations of these agencies, or consult the Occupational Outlook Handbook in public libraries or at schools for a listing of SOICC's and State employment security agencies.

The Bureau of Labor Statistics, which has eight regional offices (listed below), is still another resource to contact for local data. The staff can answer questions about how many people in your general location work in a particular occupation or industry. Local branches of professional and trade associations can also help you.

The regional offices of the Bureau of Labor Statistics are as follows:

Region I--Boston

1603 John F. Kennedy Federal Building  
Government Center  
Boston, Massachusetts 02203  
Phone: 617-223-6761  
(Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)

Region II--New York

1515 Broadway  
Suite 3400  
New York, New York 10036  
Phone: 212-944-3121  
(New Jersey, New York, Puerto Rico, Virgin Islands)

Region III--Philadelphia

3535 Market Street  
P.O. Box 13309  
Philadelphia, Pennsylvania 19101  
Phone: 215-596-1154  
(Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)



Region IV--Atlanta

1371 Peachtree Street N.E.

Suite 540

Atlanta, Georgia 30367

Phone: 404-881-4418

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

Region V--Chicago

230 South Dearborn Street

9th Floor, Federal Office Building

Chicago, Illinois 60604

Phone: 312-353-1880

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

Region VI--Dallas

525 Griffin Street

Room 221

Dallas, Texas 75202

Phone: 214-767-6971

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas)

Regions VII and VIII--Kansas City

911 Walnut Street

15th Floor

Kansas City, Missouri 64106

Phone: 816-374-2481

(VII: Iowa, Kansas, Missouri, Nebraska; VIII: Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)

Regions IX and X--San Francisco

450 Golden Gate Avenue

Box 36017

San Francisco, California 94102

Phone: 415-556-4678

(IX: American Samoa, Arizona, California, Guam, Hawaii, Nevada, Trust Territory of the Pacific Islands; X: Alaska, Idaho, Oregon, Washington)

If you seek answers to other questions about the employment of women in your State or region, or about organizations concerned with training and employment issues affecting women, you may wish to contact the appropriate regional office of the Women's Bureau, as listed below.

Region I--Boston

Room 1600  
JFK Building  
Boston, Massachusetts 02203  
Phone: 617-565-1988  
(Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont)

Region II--New York

1515 Broadway  
Room 3575  
New York, New York 10036  
Phone: 212-944-3445  
(New Jersey, New York, Puerto Rico, Virgin Islands)

Region III--Philadelphia

Room 13280, Gateway Building  
3535 Market Street  
Philadelphia, Pennsylvania 19104  
Phone: 215-596-1183  
(Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)

Region IV--Atlanta

1371 Peachtree Street, N.E.  
Room 323  
Atlanta, Georgia 30367  
Phone: 404-881-4461  
(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

Region V--Chicago

230 South Dearborn Street  
10th Floor  
Chicago, Illinois 60604  
Phone: 312-353-6985  
(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

Region VI--Dallas

555 Griffin Square Building  
Room 731  
Griffin and Young Streets  
Dallas, Texas 75202  
Phone: 214-767-6985  
(Arkansas, Louisiana, New Mexico, Oklahoma, Texas)

Region VII--Kansas City

911 Walnut Street  
Room 2511  
Kansas City, Missouri 64106  
Phone: 816-374-6108  
(Iowa, Kansas, Missouri, Nebraska)

Region VIII--Denver

1961 Stout Street  
Room 1456  
Denver, Colorado 80202  
Phone: 303-844-4138  
(Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming)

Region IX--San Francisco

Room 9301, Federal Building  
450 Golden Gate Avenue  
San Francisco, California 94102  
Phone: 415-556-2377  
(Arizona, California, Hawaii, Nevada)

Region X-- Seattle

Room 3094, Federal Office Building  
909 First Avenue  
Seattle, Washington 98174  
Phone: 206-442-1534  
(Alaska, Idaho, Oregon, Washington)

Identify Good Training Programs  
for Your Particular Field

To locate the nearest, best, and most economically available training programs for you, you may want to pursue a number of resources and contacts related to vocational education programs as well as 2- and 4-year educational institutions.

Vocational Education Programs

To help you narrow your focus and get some direction, see a high school guidance counselor if you have access to one. There are a large number and a great variety of vocational education programs. Government employment programs may also offer assistance. It is best to have a clear idea of the field that interests you and some of the financial and background resources you bring to it when you go to see any counselor. Such information will help them to help you.

Women's employment programs have developed rapidly across the country in the last 20 years. These programs encourage and train women for well paying jobs in growing fields. Many of these programs belong to a network called "Women's Work Force." To locate an employment program near you, write:

Women's Work Force  
1325 G Street, N.W.  
Lower Level  
Washington, D.C. 20005

The Women's Bureau of the U.S. Department of Labor has published material on apprenticeships that may help you move into a pathbreaking field:

A Woman's Guide to Apprenticeship. Pamphlet 17, 1980.

Women in Apprenticeship . . . There's a Future in It!  
Leaflet 58, 1980.

Information on private trade and technical schools is available from:

National Association of Trade and Technical Schools  
2251 Wisconsin Avenue, N.W., Suite 200  
Washington, D.C. 20007

A list of schools that are largely business oriented and that are accredited by the Association of Independent Colleges and Schools is available from:

Association of Independent Colleges and Schools  
1 Dupont Circle, N.W., Suite 350  
Washington, D.C. 20036

You may also wish to pursue a home study program that offers courses in your specific area of interest. A directory of accredited home study schools is available from:

National Home Study Council  
1601 18th Street, N.W.  
Washington, D.C. 20009

#### Colleges and Universities

A variety of higher education directories are listed below to help you identify institutions that offer courses and degrees in your field of interest.

##### Two-Year Colleges:

Barron's Guide to the Two-Year College. 7th edition. Hawthorne, New York, 1981. (Includes college descriptions and occupational program selector.)

Peterson's Guides to Two-Year Colleges, 1985. 15th edition. Peterson's Guides, Princeton, New Jersey, 1984.

##### Four-Year Colleges and Universities:

American Universities and Colleges. 12th edition. American Council on Education, ed., Hawthorne, New York, 1983.

Barron's Profiles of American Colleges. Woodbury, New York, 1982. (Regional editions are available also.)

College Blue Book. 19th edition. Macmillan Co., New York, New York, 1983. (Five-volume set includes narrative descriptions; tabular data; degrees offered; occupational education; scholarships, fellowships, and grants.)

Comprehensive Guide to American Colleges. 11th edition. Harper and Row, New York, New York, 1983.

Everywoman's Guide to Colleges and Universities. The Feminist Press, Old Westbury, Connecticut, 1982.

Peterson's Guides to Four-Year Colleges, 1985. 15th edition. Peterson's Guides, Princeton, New Jersey, 1984.

##### Graduate Schools:

Barron's Guide to Graduate Schools. Hawthorne, New York. (Specific volumes on social sciences and psychology; natural sciences; health and agriculture; English, communications, and foreign languages; mathematics, physical sciences, and computer sciences; education; and

engineering. Barron's also publishes guides to graduate business schools, law schools, medical and dental schools.)

Peterson's Annual Guides to Graduate Study: Graduate and Professional Programs--An Overview. 19th edition. Princeton, New Jersey, 1984. (Specific guides are available for graduate programs in engineering and applied sciences; humanities and social sciences; biological, agricultural, and health sciences; physical sciences, and mathematics.)

Find Out How To Get Credit  
for What You Know

If you are returning to school after working at home or after a number of years in the labor force, you may be able to get education credits toward a certificate or degree, based on your out-of-school experience. Contact your local education department or ask a school guidance counselor for further information. Both the Women's Bureau and the Bureau of Labor Statistics have issued material on how to receive credits for your experience. The information has been printed as an article in the Occupational Outlook Quarterly, Winter 1983: How To Get Credit for What You Know: Alternative Routes to Educational Credit.

Know Your Employment Rights

The publications listed here give a background on common problems and suggest strategies for change and improvement. These vary from describing methods for discussing problems and negotiating solutions, to giving advice on how to request a promotion or file a complaint of discrimination.

A general guide to your employment rights is:

A Working Woman's Guide To Her Job Rights. U.S. Department of Labor, Women's Bureau, Washington, D.C.

Other selected sources that address issues related to job rights follow.

Bargaining for Equality. Women's Labor Project, San Francisco, California, 1980.

Economic Facts on Women of Color. National Institute for Women of Color, Washington, D.C. (n.d.)

Effective Contract Language for Union Women. Coalition of Labor Union Women, New York, New York, 1979.

Fair Employment Program for Secretaries. Women Employed Institute, Chicago, Illinois, 1979.

Filing a Charge of Discrimination at the EEOC: The Law, the Process, Rights and Responsibilities. Women Employed Institute, 1984.

How To Ask for a Promotion. Women Employed Institute, 1980.

Information Packet on Pay Equity. Business and Professional Women's Foundation, Marguerite Rawalt Resource Center, Washington, D.C., December 1986. (Each packet contains an assortment of fact sheets, bibliographies, journal articles, brochures, pamphlets, and resource lists.)

Legislative Working Paper on Pay Equity. Business and Professional Women's Foundation of Clubs, Inc., Office of Public Policy, Washington, D.C., 1986.

Manual on Pay Equity: Raising Wages for Women's Work. Conference on Alternative State and Local Policies, Washington, D.C., 1980.

Nine to Five: The Working Woman's Guide to Office Survival. Penguin Books, New York, New York, 1983.

Pay Equity: Recommended Corporate Policies. Women Employed Institute, 1980.

Power: How To Get It, How To Use It. Ballantine Books, New York, New York, 1975.

Recommendations for Actions Elected and Appointed Officials Can Take To Achieve Pay Equity. National Committee on Pay Equity, Washington, D.C., 1983.

What Every Woman Worker Should Know About . . .

Discrimination  
Minimum Wage and Overtime Laws  
National Labor Relations Act  
Unemployment Compensation

(Series published by American Friends Service Committee, High Point, North Carolina, 1980.)

Why Should Companies Think About Women? Catalyst, New York, New York. (n.d.)

Women of Color and Pay Equity. National Committee on Pay Equity, Washington, D.C., 1983.

Be Aware of Day Care/  
Family Support Systems

If you are a working mother with small children, you may want to know how your employer can help you to balance your family and work responsibilities. You should be aware also of what support systems are available in the community at large. The sources listed below are general

references; you will, of course, have to identify local sources and options most convenient and affordable for you and your family.

Day Care for Children: Status Report. (Cassette tape) National Public Radio, Washington, D.C.

Employers and Child Care: Establishing Services Through the Workplace. U.S. Department of Labor, Women's Bureau, Washington, D.C., 1982. For sale by the U.S. Government Printing Office.

Helpful Hints for the New Working Mother. Women Employed Institute, Chicago, Illinois, 1980.

Information Digest on Dependent Care. Business and Professional Women's Foundation, Office of Issues Management, Washington, D.C., 1987.

Taking Action on Dependent Care. Business and Professional Women's Federation of Clubs, Inc., and National Council on the Future of Women in the Workforce, Washington, D.C. 1985.

Working Mothers/Parents: Recommended Corporate Policies. Women Employed Institute, 1980.

#### Find Out About Health and Safety in the Workplace

Your concern about health and safety on the job should lead you to investigate conditions in your present or proposed workplace, and to become aware of the laws covering health and safety. First, collect information about common health and safety problems. Second, get together with your coworkers to assess conditions where you work. An informal discussion with your supervisors or managers may prompt them to remedy a situation--especially if they were not aware of the problems. If this does not work, you may want to write a formal memorandum to your managers pointing out the problems you have discovered. If the unresolved problems involve violations of laws covering health and safety, you may consider contacting the appropriate governmental agency.

The following publications give information on typical hazards, suggest ways to improve conditions, and inform you of your legal rights.

Guidelines on Pregnancy and Work. National Institute for Occupational Safety and Health, National Technical Information Service, Cincinnati, Ohio, 1977.

The Human Factor: 9 to 5's Consumer Guide to Word Processors. 9 to 5, National Association of Working Women, Cleveland, Ohio, 1982.

Office Automation and the Secretary: Recommended Corporate Policies. Women Employed Institute, Chicago, Illinois, 1982.

Office Hazards: How Your Job Can Make You Sick. Tilden Press, Washington, D.C., 1981.



Technical Memo on VDT Risks. 9 to 5, National Association of Working Women, 1983.

What Every Woman Worker Should Know About Job Safety and Health. American Friends Service Committee, High Point, North Carolina, 1981.

Women and Office Automation: Issues for the Decade Ahead. U.S. Department of Labor, Women's Bureau, Washington, D.C., 1985.

Women's Work, Women's Health. Pantheon Books, New York, New York, 1977.

Working With Your Video Display Terminal (VDT). Business and Professional Women's Foundation and American Council on Life Insurance, Washington, D.C., 1986. (Contact American Council on Life Insurance.)

Know What To Do If You  
Are Sexually Harassed

If someone at your workplace makes unwanted advances toward you, you may have to take action beyond asking that person to stop. To be aware of what steps to take in the event you are sexually harassed, see the Women's Bureau publication, A Working Woman's Guide To Her Job Rights, cited earlier, and the following publications.

Combatting Sexual Harassment: EEOC Guidelines, Model Policies for the Office, Women Employed Testimony, Sample Letters. Women Employed Institute, Chicago, Illinois, 1983.

Equal Employment Opportunity Commission: How To File Job-Related Sexual Harassment Complaints. Working Woman's Institute, New York, New York, 1983.

Fighting Sexual Harassment: An Advocacy Handbook. Alliance Against Sexual Coercion, Cambridge, Massachusetts, 1979.

National Labor Relations Board: How To File an Unfair Labor Practice Charge for Job-Related Sexual Harassment. Working Woman's Institute, 1983.

Reducing Harassment of Women in Employment in the 1980's: A Leadership Guide for Employees, Employers, Practitioners, and Advocates. Center for Women Policy Studies, Washington, D.C., 1985.

Tort and Contract Law: How To File Job-Related Sexual Harassment Cases. Working Woman's Institute, 1983.

What Every Woman Worker Should Know About Sexual Harassment. American Friends Service Committee, High Point, North Carolina, 1980.

Acquire a Realistic Image of the Workplace  
If the World of Work Is New to You

If you have never worked before, or if you are planning to enter a pathbreaking job, you will want to know what life on the job is really like. Several writers have interviewed people about their work lives and have written books based on those stories. Some of these are:

All the Livelong Day. Barbara Garson. Penguin Books, New York, New York, 1977.

Pink Collar Workers. Louise K. Howe. Avon Books, New York, New York, 1978.

Working. Studs Turkel. Avon Books, New York, New York, 1982.

Appendix

REFERENCES USED IN PART 1



## REFERENCES USED IN PART 1

The references listed here provided the background and supporting data for discussions throughout Part 1. You may also find these sources useful as you research your occupation.

Advances in Automation Prompt Concern Over Increased U.S. Unemployment. U.S. General Accounting Office, Washington, D.C., 1982.

Bridging the Skills Gap: Women and Jobs in a High Tech World. Wider Opportunities for Women, Washington, D.C., 1983.

"Contrasting Sexual Harassment in Female- and Male-Dominated Occupations." Suzanne Caruthers and Peggy Crull. In My Troubles Are Going To Have Trouble With Me, Rutgers University Press, New Brunswick, New Jersey, 1984.

"Debunking Career Myths." In National Business Woman, Vol. 65, No. 2, National Federation of Business and Professional Women's Clubs, Washington, D.C., 1984.

The Deindustrialization of America. Barry Bluestone and Bennett Harrison. Basic Books, New York, New York, 1982.

Digest of Education Statistics, 1981. National Center for Education Statistics, Washington, D.C., 1981.

"Discrimination Against Women, Occupational Segregation, and the Relative Wage." Harriet Zellner. In American Economic Review, Vol. 62, No. 2, 1972.

"Earnings of Men and Women: A Look at Specific Occupations." Nancy F. Rytina. In Monthly Labor Review, Vol. 105, No. 4, U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C., 1982.

The Educational Implications of High Technology. Henry M. Levin and Russell Rumberger. Stanford University Institute for Research on Educational Finance and Governance, Stanford, California, 1983.

"Employment Discrimination in Today's and Tomorrow's Economy." Thierry Noyelle. Paper presented at conference on Women, Clerical Work, and Office Automation: Issues for Research, sponsored by the Women's Bureau, U.S. Department of Labor, and the National Research Council, National Academy of Sciences, Washington, D.C., 1984.

Factsheet on Women: Women and Work. American Council on Life Insurance, Washington, D.C., 1982.

"The Female-Male Unemployment Differential." L. DeBoer and M. Seeborg. In Monthly Labor Review, Vol. 107, No. 11, U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C., 1984.

"From Psyche to Technic: The Politics of Office Work." Anne Machung. Ph.D. dissertation, University of Wisconsin, Madison, Wisconsin, 1983.

The Hazards of VDT's. Ontario Public Service Employees Union, Toronto, Canada, 1981.

The Managed Heart. Arlie R. Hochschild. University of California Press, Berkeley, California, 1983.

"Maquiladoras: The View From the Inside." Maria Patricia Fernandez-Kelly. In My Troubles Are Going To Have Trouble With Me, Rutgers University Press, New Brunswick, New Jersey, 1984.

"The 1995 Labor Force: BLS' Latest Projections." Howard N. Fullerton, Jr. In Monthly Labor Review, November 1985, U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C.

"Occupational Employment Projections: The 1984-95 Outlook." George T. Silvestri and John Lukaszewicz. In Monthly Labor Review, November 1985.

Occupational Outlook Handbook. 1986-87 edition. U.S. Department of Labor, Bureau of Labor Statistics, Washington, D.C., 1986.

"Occupational Segregation and Earnings Differences by Sex." Nancy F. Rytina. In Monthly Labor Review, Vol. 104, No. 1, 1981.

"Occupational Winners and Losers: Who They Were During 1972-1980." Carol Boyd Leon. In Monthly Labor Review, Vol. 105, No. 6, 1982.

"A Schizophrenic Recovery." In Business Week, October 29, 1984.

Race Against Time. Working Women, National Association of Office Workers, Cleveland, Ohio, 1980.

Technical Memo on VDT Risks. 9 to 5, National Association of Working Women, Cleveland, Ohio, 1982.

Twenty Facts on Women Workers. U.S. Department of Labor, Women's Bureau, Washington, D.C., 1984.

"Wage Discrimination, Job Segregation and Women Workers." Ruth G. Blumrosen. In Women's Rights Law Reporter, Vol. 6, Nos. 1 and 2, 1979 and 1980.

"Women's Wages and Job Segregation." Mary Stevenson. In Policy and Society, 1973.

Women's Work, Women's Health. Jeanne Mayer Stellman. Pantheon Books, New York, New York, 1977.

